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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,925	09/10/2003	Basil Karanikos		3129

7590
Wolf Greenfield
600 Atlantic Avenue
Boston, MA 02110

01/30/2007

EXAMINER

DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
1723	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/658,925	Applicant(s) KARANIKOS ET AL.	
	Examiner Joseph W. Drodge	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Amendment filed on July 13, 2006.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4,7,12-14,17,22-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 (Sylvan) in view of newly cited WO patent 91/14389 to Frise (Frise).

Regarding independent claims 1, 12 and 44, Sylvan discloses a coffee filter including a filter cartridge comprising container with bottom and side walls in portion 64 extending upwards to a closing cover 62 having top opening 72 (column 4, lines 16-27). The cartridge houses filter element 16 with bottom 56 and sloping side walls 50 and 52 (column 3, lines 54-60), the filter element being ***joined directly at a peripheral junction 24 with the adjacent interior wall surface of the cartridge housing (see column 3, lines 48-62 and figure 4).*** The filter element is of synthetic fibers such as of polypropylene. The interior of the filter cartridge is thus divided into a first chamber housing beverage 22 and second chamber 42 receiving outflow from the filter (column 3, line 66-column 4, line 3).

The filter of Sylvan is characterized as being totally self-supporting and resistant to sagging and collapse, and particularly designed for preparing coffee beverages (column 3, lines 2-4 and 10-15).

The claims all differ in requiring the filter element to be pleated or corrugated. However, Frise teaches a coffee filter element that is reusable, is of fibrous material such as polypropylene (or other materials similar to those employed by Sylvan) and has side walls which are fluted or pleated (see Translated Abstract, and page 2). Recited characteristics and advantages of the Frise filter element include it's being capable of maintaining it's shape and being non-collapsing, under any condition of distortion, due in part to it's being very flexible and having shape memory. The filter of Frise is further characterized as being resistant to mechanical and thermal stresses and readily

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washed or otherwise cleaned prior to it's reuse (See Abstract, page 3, discussion following reference to figure 3 concerning it's molding in the manufacturing process, and middle and bottom portions of page 4.

It is submitted that the Frise filter may be made in different shapes and dimensions as dictated by the specifics of an intended filter application (explicit recitation of page 3 of Frise following reference to figure 3).

It would have been obvious to one of ordinary skill in the art to have modified the coffee filter device of Sylvan by utilizing a pleated or fluted filter, as taught by Frise, in order to further augment the self-supporting aspect of the filter and under any condition of distortion including mechanical and thermal stresses and stresses of the filter being removed for washing and cleaning prior to re-insertion. In summary, to have made the Sylvan filter pleated or fluted as in Frise would make the filter more resiliently self-supporting.

Regarding various dependent claims, Sylvan also discloses features of the filter side wall, Sylvan also discloses features of container and side wall being parallel, height of filter side wall being between 50 and 100% of height of filter cartridge, cartridge and cover having impermeable walls and being frustoconical, upper rim 18 of the cartridge and top and bottom piercing means (70 and 74); all generally clearly illustrated in the figures.

Regarding claims 3,4,32 and 33, Frise teaches the filter side wall having pleats or flutes which function as filtrate exit channels (page 2); flutes are considered a form of pleats or corrugations.

2. Claims 3,5,6,9-11,15-16,19-21 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 in view of newly cited WO patent 91/14389 to Frise (Frise), as applied to claims 1 and 12 and further in view of Daswick, U.S. 3,971,305.

Regarding Claims 5,6,15 and 16, Daswick discloses or suggests that the filter extends downward and away from the container at an angle of less than about 1 degree (Col. 4, Lines 1-4). It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Tanner with the element of Daswick in order to provide portions spaced outwardly from the filter to allow flow freely outside the filter (Col. 4, Lines 1-5).

Regarding Claims 9-11 and 19-21, Lesser in view of Tanner does not disclose lower permeability and increased thickness in the lower region of the filter element. Daswick teaches a beverage filter cartridge wherein reduced permeability is achieved by increasing the thickness by lining the lower region of the filter element with an insert (Fig. 2, #28) of like filter material. It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Tanner with the element of Daswick in order to retain the beverage media within the filter (Col. 3, Lines 11-15).

3. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 in view of newly cited WO patent 91/14389 to Frise (Frise), as applied to claims 1 and 12 and), and further in view of Michielsen, U.S. Patent No. 3,389,650.

Regarding Claims 8 and 18, Lesser in view of Tanner does not disclose channels increasing in width. Michielsen teaches a beverage filter cartridge comprising exit channels that increase in width to a maximum adjacent the filter bottom. (Fig. 1, #2). It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Tanner with the element of Michielsen because it is a corrugated structure common in the filter art.

Response to Arguments

Applicant's arguments filed on December 5, 2006 have been fully considered but they are not persuasive. It is argued that there is no motivation in the Frise patent to make the filter of Sylvan fluted or pleated, since increased filter surface area is not necessarily advantageous for preparing coffee beverages and since Frise teaches a filter that conforms to housing side walls or base instead of spaced from walls and base as in Sylvan. In response, Frise extensively and explicitly describe additional advantages and motivations to make a coffee filter fluted or pleated, concerning making the filter resiliently self-supporting despite thermal and mechanical stresses and stresses encountered during washing and cleaning.

It is also argued that the Frise filter conforms closely to the filter basket instead of being spaced from the filter basket as in Sylvan, pointing away from combination of the references. It is submitted that the Frise filter may be made in different shapes and dimensions as dictated by the specifics of an intended filter application (explicit recitation of page 3 of Frise following reference to figure 3).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

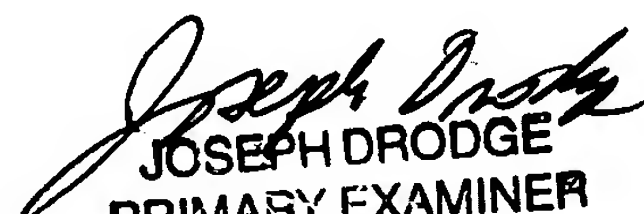
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph W. Drodge whose telephone number is 571-272-1140. The examiner can normally be reached on 8:30-5:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD
January 23, 2007


JOSEPH DRODGE
PRIMARY EXAMINER